Minnesota Energy Code Adoption

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U.S. DOE Determination of Energy Codes

• The U.S. DOE is required to issue a determination as to whether the latest edition of the Commercial Energy Code (ASHRAE Standard 90.1) or the latest version of the Residential Energy Code (International Energy Conservation Code or IECC) will improve energy efficiency.

• DOE has 1 year to publish a determination in the Federal Register after each new edition of the standard/code is published.
M.S. 326B.106 – Adoption of the Code

The commissioner shall act on each new model energy code in accordance with federal law for which the U.S. Department of Energy has issued an affirmative determination.
State Certification – Commercial Energy Code

• Upon publication of an affirmative determination that the new code is more energy efficient, states have 2 years to certify that they have reviewed & updated their codes to meet or exceed the updated edition of ASHRAE 90.1. [Mandatory state adoption]

• State certifications for ASHRAE Standard 90.1-2019 must be submitted by July 28, 2023. DOE estimates 4.7% site energy savings.

Proposed new Minnesota commercial energy code

On July 23, 2021, the Minnesota commercial energy code TAG issued a report that recommends adopting ASHRAE 90.1-2019 with modifications. The Construction Codes Advisory Council agreed.

As a result, the department is in process of drafting Rules adopting ASHRAE 90.1-2019 with an anticipated effective date in late 2022 or early 2023.
State Certification – Residential Energy Code

• Upon publication of an affirmative determination that the new code is more energy efficient, states have 2 years to certify that they have made a determination whether it is appropriate for them to revise their energy code to meet or exceed the updated edition. [No mandatory state adoption]

• State certifications for the 2021 IECC must be submitted by July 28, 2023. DOE estimates 9.4% site energy savings.
Current Residential Energy Code

- Minnesota adopted the current residential energy code, the **2012 IECC** for residential bldgs., on Feb 14, 2015.

Newer Residential Energy Code Considerations

- Minnesota skipped review & adoption of the **2015 IECC** for residential buildings.

- Minnesota reviewed but did not adopt the **2018 IECC** for residential buildings due to minor efficiency gains.

- The Department plans to review and evaluate the **2021 IECC** in the spring of 2022.
Process for adopting a new Residential Energy Code e.g., 2021 IECC

1) Public Hearing (DOE requirement): A State Determination whether to adopt the new Residential Energy Code must be made in writing after public notice & hearing based upon findings & evidence provided at the hearing & made available to the public. (Spring 2022)

2) Determination by the Commissioner: The Commissioner of Labor & Industry reviews findings of the hearing and determines whether to explore and review the appropriateness of the new model energy code in consultation with the CCAC. (Spring/Summer 2022)

3) CCAC appoints Technical Advisory Group: If the Commissioner decides to proceed, research & analysis must be conducted in cooperation with practitioners in residential construction & building science (TBD)

4) Affirmative Recommendation by CCAC: The Commissioner may not adopt new model energy codes without an affirmative recommendation by the CCAC. (TBD)

5) Rulemaking begins. (TBD)
326B.118 - The commissioner may not adopt all or part of a model energy code relating to the construction of residential buildings without research and analysis that addresses, at a minimum, air quality, building durability, moisture, enforcement, enforceability cost benefit, and liability. The research and analysis must be completed in cooperation with practitioners in residential construction and building science and an affirmative recommendation by the Construction Codes Advisory Council.
Statutory standards for State Building Codes – 2nd Step of Cost considerations

M.S. 326B.101 – As all codes including the residential energy code is considered for adoption, each of these must be evaluated by CCAC & the Department

- Must conform as practicable to model building codes
- Must provide basic & uniform performance standards
- Establish reasonable safeguards
- Tend to lower construction costs
- Applies statewide & supersedes code of any municipality
Rulemaking standards for State Building Codes – 3rd Step of Cost Considerations

M.S. Chapter 14 - SONAR analysis requirements for proposed rule:

• The classes of persons who will bear the costs
• Probable costs to agencies for implementation & enforcement
• A determination if there are less costly methods to achieve the purpose of the rule
• Probable costs or consequences of not adopting the proposed rule
• If compliance costs for a small business or small city will exceed $25,000 the first year
Historical Cost impacts by Residential Energy Codes

1991 - Energy Efficiency in Buildings
M.S. 15B.165 - So far as is compatible with interests of public health and safety, the amendments must be designed to equal or exceed the most energy-conserving codes adopted by any other state. (repealed in 1999)

2009 - American Recovery & Reinvestment Act (ARRA)
Established conditions for receiving $54M to boost State’s energy economy. One condition was that states adopt & implement a residential energy code that meets or exceeds the most recent edition of the IECC (energy code). In March of 2009, then Governor Pawlenty signed this agreement with the USDOE. As a result, Minnesota adopted the 2012 IECC in 2015.
Improvements in Residential Energy Codes (1983 - 2021)

- Normalized Energy Use
- Year/Code

- 1983 MEC
- 1986-92 MEC
- 1993 MEC
- 1995 MEC
- 1998 MEC
- 2000-03 IECC
- 2006 IECC
- 2009 IECC
- 2012 IECC
- 2015 IECC
- 2018 IECC
- 2021 IECC

- MEC - Model Energy Code
- IECC - International Energy Conservation Code

- State adopted codes
- Not adopted

- 30% increase

Questions